

CHAPTER III

THE RESEARCH METHODOLOGY

A. The Research Design

The design of this research is quasi experimental research to find out the effect of using Active Knowledge Sharing strategy on speaking ability. According to Cresswell, experimental is test an idea (or practice or procedure) to determine, whether it influences an outcome of dependent variable.¹ Furthermore, Gay and Peter Airasian stated that quasi experimental design is used when the researcher keeps the students in existing classroom intact and the entire classroom are assigned to treatment.²

In conducting this research, the writer used a quasi-experimental design: the pretest-post-test non-equivalent group design. The writer took two classes: one class was an experimental class taught by using Active Knowledge Sharing strategy and the other was a control class taught by using conventional technique. In the experimental class, the students were administered by giving pre-test at the beginning of the teaching learning in order to find out the students' speaking ability.

According to Cresswell the type of this research can be designed as follows:³

Table III.1
The Research Design

Group	Pre-test	Treatment	Post-test
E	Test 1	X	Test 2
C	Test 1	—	Test 2

E = Experimental group

¹John W. Creswell. *Education Research: Planning Conducting, and Evaluating Quantitative and Qualitative Research*. (New Jersey: Pearson Education, 2008), p.299

²L.R. Gay and Peter Airasian. *Education Research: Competence for Analysis and Application*. (New Jersey: Prentice-Hall, Inc, 2000), p.367

³John W. Creswell, *Op.Cit.* pp.314.

C = control group

T1 = pre –test for both experimental group and control group

X = receive the treatment

T2 = post-test for both experimental and control group

B. The Time and Location of the Research

The research was conducted at SMPN 1 Kampar Timur Regency, Located on Pekanbaru-Bangkinang Street, Km. 39, Kampar. This research was conducted out from 03-31 January 2014.

C. The Subject and Object of The Research

The subject of this research was the eight grade students of SMPN 1 Kampar Timur Regency. While the object was the use of Active Knowledge Sharing strategy on students' speaking ability in learning speaking.

D. The Population and sample of the Research

1. Population

The population of this research was the eight grade students of SMPN 1 Kampar Timur. The students have two classes, all of the classes for social department, namely; VIII 1 by 18 students, VIII 2 by 18 students. The total number of the eight year students at SMPN 1 Kampar Timur Regency is 36 students.

Table III.2
The Total Population of the Second Grade students at
SMPN 1 Kampar Timur Regency

No	Classes	Population		Total
		Male	Female	
1.	VIII 1	5	13	18
2	VIII 2	7	11	18
	Total population			36

2. Sample

Based on the design research above, the writer used total sampling. To takes them all of the population as the sample of this research. One of the classes was the experimental group and another class was the control group. The experimental group VIII 1 consisted of 18 students, and control class VIII 2 consisted of 18 students. Those are as the sample of this research with 36 students.

E. The Technique of Data Collection

In this research, the writer used oral presentation test to collect the data to find out students' speaking ability. The test was done twice, before and after giving the treatment intended to obtain the students' speaking ability of the eightgrade at SMPN 1 Kampar Timur.

The data of this research were gotten from pre-test and post-test in two times. The data were collected through the following procedures:

1. The students were given pre-test and post-test in oral presentation.
2. The students' speaking was recorded by the writher, backed up into CD. Then it was collected to evaluate the appropriate grammar, vocabulary, pronunciation fluency and comprehension.
3. The writer used two raters to score the students' speaking ability.
4. The writer collected and summed up raters' score to get each student's score
5. Then, the recording of students' speaking was assessed and scored by two raters.

The classification of the students' score can be seen from the table below:⁴

Table III.3
The Classification of the Students' Score

Score	Categories
80 – 100	Very good
66 – 79	Good
56 – 65	Enough
40 – 55	Less
30 – 39	Fail

To assess of students' score in speaking is as follows:⁵

⁴Suharsimi Arikunto. *Dasar-Dasar Evaluasi Pendidikan*. (Jakarta: Bumi Aksara. 2009). p. 245

Table. III.4
Assessment Of Speaking Skill

NO	ASPECTS OF SPEAKING	SCORE			
		1	2	3	4
1	Grammar				
2	Vocabulary				
3	Pronunciation				
4	Fluency				
5	Comprehension				
	Maximum Score	20			

$$\text{Final Score} = \frac{\text{Total Score}}{\text{Maximum Score}} \times 80$$

F. Technique of Data Analysis

In analyzing the data, the researcher used t-test formula. The data were analyzed by using SPSS 16.0 version. The t-table was employed to see whether there is a significant effect between the mean score of gain both experimental and control group. The t-obtained value was consulted with the value of t-table at the degree of freedom (df) = (N1+N2) -2. Statistically hypotheses are:

$$H_a = t_o \geq t\text{-table}$$

$$H_o = t_o < t\text{-table}$$

H_a is accepted if $t_o > t\text{-table}$ or there is significant effect between pretest and posttest of using of Active Knowledge Sharing strategy on students' speaking ability of the eight grade of SMPN 1 Kampar Timur Regency.

H_o is accepted if $t_o < t\text{-table}$ or there is no significant effect between pre-test and post-test of using of Active Knowledge Sharing strategy on students' speaking ability of the eight grade of SMPN 1 Kampar Timur Regency.

To see the students' speaking ability, the writer used graduated standard of English lesson in SMPN 1 Kampar Timur Regency that was 70. The students who got the score < 70,

⁵Lesson Plan SMPN 1 Kampar Timur.

they did not pass the graduated standard, however, for those who got the score > 70 , they passed the graduated standard.

G. The Validity and Reability of The Test

The test used for testing students' speaking ability had to have validity and reability. The test to be valid if it measures accurately what it is intended to measure.⁶ There are five types of validity, they are content validity, and construct validity of the test, the researcher used construct validity.

The reliability means that an instrument is stable and consistent.⁷ In determining the reliability of the test in this research, the writer used inter-rater reliability formula because the researchers used two raters in assessing and scoring the students' speaking skills, the scores given by rater 1 were correlated to the scores given by rater 2. To determine the correlation between both of the scores given by rater 1 was correlated to the scores given by rater 2, the writer used *Pearson Product Moment* formula through SPSS 16.0 version.

Correlations		
	Rater1	Rater2
Rater1 Pearson Correlation	1	.401**
Sig. (2-tailed)		.000
N	18	18
Rater2 Pearson Correlation	.401**	1
Sig. (2-tailed)	.000	
N	18	18

** . Correlation is significant at the 0.01 level (2-tailed).

From the output above, it could be seen that r calculation is 0.401 correlated to r_{table} , $df=34$. Because $df=34$ not found from the r_{table} , so the researcher took $df=35$ to be correlated

⁶ Arthur Hedges, *Testing for Language Teacher*, (Cambridge University Press, 2003). p26

⁷ Jhon W Creswell. 2002. *Educational Research*. (Boston: Pearson Education). p 169.

either at level 5% and 1%. At the level 5% r table is 0,203, while at the level 1% r table is 0,272. It is clear that $0.203 < 0.401 > 0.272$. So the writer concluded that H_0 was rejected and H_a was accepted. It means that there was a significant correlation between scores given by rater 1 and rater 2. In other words, the speaking test was Reliable.